

REMARKS

The present amendment is in response to the Office Action, dated April 15, 2004, where the Examiner has rejected claims 1-81. By the present amendment, applicants have amended claims 22, 26, 29, 30, 34, 37, 38, 43, 46, 47, 50, 51, 52, 55, 56, 61, 64, 65, 69, 70, 75, 76 and 81. Accordingly, after the present amendment, claims 1-81 are pending in the application. Reconsideration and allowance of pending claims in view of the amendments and the following remarks are respectfully requested.

A. Rejection of Claims 22, 26, 29, 30, 34, 37, 38, 43, 46, 47, 50, 51, 52, 55, 56, 61, 64, 65, 69, 70, 75, 76 and 81 under 35 USC § 112, ¶ 2

The Examiner has rejected claims 22, 26, 29, 30, 34, 37, 38, 43, 46, 47, 50, 51, 52, 55, 56, 61, 64, 65, 69, 70, 75, 76 and 81 under 35 USC § 112, ¶ 2, because the term “portion” is a relative term, which renders the claim indefinite.

By the present amendment, applicants have amended claims 22, 26, 29, 30, 34, 37, 38, 43, 46, 47, 50, 51, 52, 55, 56, 61, 64, 65, 69, 70, 75, 76 and 81 to replace the term “portion” with --audio signal--. Applicants respectfully submit that the Examiner’s rejection has been overcome.

B. Rejection of Claims 1, 5, 8 and 22-81 under 35 USC § 102(e)

The Examiner has rejected claims 1, 5, 8 and 22-81 under 35 USC § 102(e) as being anticipated by Arnaud et al. (USPN 6,650,662) (hereinafter “Arnaud”). Applicants respectfully disagree.

First, the Examiner’s attention is directed to claim 1 of the present application, as amended, which in part reads: “if a potential DTMF signal is detected, storing the digital packets and stalling transmission of stored digital packets until DTMF detection can be performed, and if

the potential DTMF signal does not result in a DTMF detection, promptly transmitting the stored digital packets, and if the potential DTMF signal does result in a DTMF detection, discarding the stored digital packets and transmitting a control packet containing information relating to characteristics of a DTMF signal that was detected.” In other words, according to claim 1, when a potential DTMF signal is detected, the digital packets are stored and discarded if the DTMF signal is validated to be a true DTMF signal, and instead of the discarded digital packets, a control packet containing information relating to characteristics of the DTMF signal is transmitted. However, if the potential DTMF is determined to be a false DTMF signal, the stored digital packets are transmitted.

It is respectfully submitted that Arnaud’s approach is sharply different. According to Arnaud, when a candidate or potential DTMF signal is detected, transmission of digital packets is not stalled, but continues.

In response to applicants’ arguments, the Examiner states as follows:

Arnaud discloses “stalling transmission of stored digital packets until DTMF detection can be performed” when the DTMF detector (203) detects and validates DTMF signals (See column 5, lines 26-28.) The DTMF detector intrinsically delays the transmission of the stored packets while performing the DTMF validation process (See Figure 12 and column 13, line 30.) (Office Action, page 22.)

Applicants respectfully direct the Examiner’s attention to Figure 2 of Arnaud, where it is shown that the incoming signal from channel 200 is presented in parallel to DTMF detector 203 and filter 201. (See col. 5, lines 24-26.) Applicants respectfully submit that DTMF detector 203 does not delay the transmission of the stored packets while performing the DTMF validation process, intrinsically or otherwise. This is because filter 201 also receives the incoming signal in parallel with DTMF detector 203, and it is filter 201 that provides the continuous transmission

path after removal of a frequency and by feeding compression 204 with filtered audio signal, where compression 204 packetizes the audio signal for transmission by transmit interface unit 205. Accordingly, the system shown in FIG. 2 of Arnaud does not stall transmission of stored digital packets until DTMF detection can be performed, but continues transmission through filter 201 after detection of a potential DTMF signal.

Applicants respectfully submit that FIG. 12 of Arnaud, which the Examiner has referenced, further shows that filtering step 1202 is performed in parallel with storing step 1210, and that while the audio signal is being stored for validation of DTMF signal, the audio signal is packetized and transmitted at steps 1203-1205. However, in sharp contrast to Arnaud, in claim 1 of the present application, while the potential DTMF signal is being validated, transmission of digital packets is stalled and no digital packet is transmitted, filtered or otherwise, until the validation phase ends.

As stated above, Arnaud filters the digital packets whenever a candidate DTMF signal is detected to block out one of the dual tones of each possible DTMF signal and continues transmitting the filtered digital packets. Arnaud's approach has a major drawback, because four different frequencies must be filtered out of the digital packets (e.g. 1209Hz, 1336Hz, 1477 Hz and 1633Hz) whenever a candidate DTMF is detected. (See table shown at col. 6, lines 15-25.) As a result, the digital packets are filtered and transmitted while the candidate DTMF signal is being validated, even though it may later turn out that the candidate DTMF signal was a false DTMF signal, and that those frequencies should not have been filtered out.

Claim 1 of the present invention, however, does not suffer from such drawback, because the digital packets are stored and stalled until it is determined whether the potential DTMF signal

is a true or false DTMF signal. If it is determined that it was a false detection, the stored digital packets are transmitted intact.

Accordingly, claim 1, as amended, and its dependent claims 2-16 are patentably distinguishable over Arnaud and should be allowed. Further, independent claims 17 and 19 have limitations similar to those of claim 1, as described above, and should be allowed at least for the same reasons stated above. Claims 18 and 20-21 depend from claims 17 and 19, respectively, and should be allowed at least for the same reasons claims 17 and 19 are allowable. Further, applicants respectfully submit that claims 22-81 further include limitations similar to “stalling said transmission of said digitized samples in response to said detecting” and, thus, claims 22-81 are also patentably distinguishable over Arnaud for the same reasons stated above in conjunction with patentability of claim 1.

C. Rejection of Claims 2-4, 6, 7, 9, 10 and 17-21 under 35 USC § 103(a)

The Examiner has rejected claims 2-4, 6, 7, 9, 10 and 17-21 under 35 USC § 103(a) as being unpatentable over Arnaud in view of Kozdon (USPN 6,385,192) (“Kozdon”). Applicants respectfully disagree.

Applicants respectfully submit that claims 2-4, 6, 7, 9, 10 and 17-21 depend from claim 1 and should be allowed at least for the same reasons stated above in conjunction with patentability of claim 1.

D. Rejection of Claims 11-16 under 35 USC § 103(a)

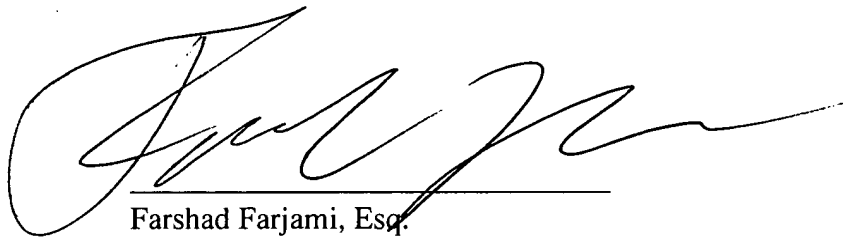
The Examiner has rejected claims 11-16 under 35 USC § 103(a) as being unpatentable over Arnaud in view of Kozdon, and further in view of Schulzrinne (ietf-avt-dtmf-01.txt) (hereinafter “Schulzrinne”). Applicants respectfully disagree.

Applicants respectfully submit that claims 11-16 depend from claim 1 and should be allowed at least for the same reasons stated above in conjunction with patentability of claim 1.

E. Conclusion

For all the foregoing reasons, an early allowance of claims 1-81 pending in the present application is respectfully requested. The Examiner is invited to contact the undersigned for any questions.

Respectfully Submitted;
FARJAMI & FARJAMI LLP

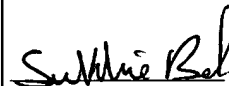



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